

Robert A. Longenbaugh
Consultant Water Engineer
6108 W. Iowa Pl.
Lakewood, CO 80232-7025

September 4, 2007

Arnie Good:

I am responding to your inquiry in your August 29, 2007 Email. I have also studied Dr. Drunford's response to Stulp's request. In general, I strongly agree with Dr. Drunford's recommendations. As I have testified at both the Greeley and Sterling hearings, it is essential for Colorado to utilize both the ground and surface water. A regional management authority such as the South Platte River Conservancy District could develop policies and implement practices to maximize the beneficial use of both the ground and surface water.

Because of the numerous infrastructure and natural changes that are, presently occurring the South Platte River regime is rapidly changing and strict prior appropriation administration without use of ground water will result in the retrograding to early 1900's conditions. Additional ground water usage is essential to provide the water needed during drought periods for both irrigated agriculture and municipal use.

Future River administration will require a well-calibrated ground and surface water model to make good management decisions to maximize the beneficial use of both ground and surface water while still protecting senior surface rights. Maybe the SPDSS will satisfy this need, but there will be a need for current data to operate the model. The model must be able to incorporate the infrastructure and natural changes causing the River regime changes. Not only should the model simulate the River depletions caused by well pumping, but it must also simulate the loss of River flow due to phreatophyte consumptive use. Well pumping should lower the regional water table and salvage water lost to phreatophyte consumptive use. The model must be able to evaluate these phenomena.

The South Platte River Task Force must make recommendations that will result in conjunctive use of both ground and surface water.

Robert Longenbaugh